IN THE CLAIMS

Please make the following amendments to the claims as follows.

1. (Cancelled)

2. (Currently Amended) A method according to claim [[1]] 47 in which one or more of the first set of primers are provided with an SNP identifying portion, the SNP identifying portion being different for each different primer, the primer with an SNP identifying ~~identity~~ portion which pairs to an ~~the~~ SNP[[,]] annealing to one side of the SNP.

3. (Cancelled)

4. (Currently Amended) A method according to claim 63 [[1]] in which the locus specific portion of the primers of the first set includes a sequence which pairs to ~~matches~~ the sequence of the locus sequence in the vicinity of an ~~the~~ SNP under investigation, the pairing ~~match~~ between the locus specific portion and sequence of the locus commencing at between one and ten bases to the respective sides of the SNP under investigation.

5. (Currently Amended) A method according to claim [[1]] 47 in which the first set of primers includes a reverse primer and further includes a forward primer for each possible identity of the SNP under investigation.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) A method according to claim 63 [[1]] in which at least two different primers for investigating a particular SNP are provided, the locus specific portion of the different primers in the first [[a]] set being ~~are~~ provided with identical sequences in ~~each primer~~ the different primers for a particular SNP.

9. (Currently Amended) A method according to claim 63 [[1]] in which the single nucleotide polymorphism has a locus sequence on the 3' side of the locus, the further portion includes a sequence which does not pair with ~~match~~ the locus sequence on the 3' side of the locus with which the locus specific portion of the primer pairs ~~matches~~.

10.-17. (Cancelled)

18. (Currently Amended) A method according to claim [[1]] 45 ~~in which~~ wherein the distinctive unit is selected from the group consisting of a dye, dye label, colour producing molecule, molecular beacon, and emitter of radiation[[,]] ~~characteristic isotope~~.

19. (Currently Amended) A method according to claim 47 [[17]] in which the second set of primers include forward primers with a 5' end, a distinctive unit is provided at the 5' end of the forward primers of the second set of primers, a different distinctive unit being provided for each different forward primer in the [[a]] second set of primers.

20. (Currently Amended) A method according to claim 47 [[17]] in which the distinctive unit is indicative of the nucleotide present ~~presence~~ at the single nucleotide polymorphism ~~SNP~~.

21.-25. (Cancelled)

26. (Currently Amended) A method according to claim [[1]] 47 in which the first and second set of primers are present together and in which the concentration of the second set of primers is provided in a ratio relative to the concentration of the first set of primers of at least 5:1.

27. (Currently Amended) A method according to claim [[1]] 47 in which the first and second set of primers are present together, the first set of primers is provided at a concentration of between 10 and 200nM and the second set is provided at a concentration of between 400 and 4000nM.

28. (Currently Amended) A method according to claim [[1]] 47 in which the first and second set of primers are present together and the annealing temperature for one or more ~~at least some~~ of the cycles of the amplification process is such that at least 80% of the second set of primers remain single stranded.

29. (Original) A method according to claim 28 in which the annealing temperature is so provided and used at least in cycles 3 to 30.

30. (Currently Amended) A method according to claim [[1]] 47 in which a plurality of amplification cycles are conducted as part of an amplification process, each cycle having an annealing temperature and the [[an]] annealing temperature which is used in at least the last two cycles[[,]] ~~the annealing temperature allowing~~ allows at least 80% of the second set of primers to anneal.

31. (Currently Amended) A method according to claim [[1]] 47 in which a plurality of amplification cycles are conducted as part of an amplification process, each cycle has an annealing temperature and the annealing temperature is at least 72°C for cycles 3 to 30 of the amplification process.

32. (Currently Amended) A method according to claim [[1]] 47 in which a plurality of amplification cycles are conducted as part of an amplification process, each cycle has an annealing temperature and the annealing temperature for at least the last two cycles of the amplification process is 62°C or less.

33. (Currently Amended) A method according to claim [[1]] 47 in which the amplification products are provided by [[of]] two or more first sets of primers and one or more second sets of primers and the amplification products are separated from one another using electrophoresis.

34. (Currently Amended) A method according to claim [[1]] 47 in which the further amplified product is contacted with one or more components retained on a solid support, the one

or more components having a sequence which hybridises ~~anneals~~ with at least part of the sequence of one of the further amplified products.

35. (Currently Amended) A method according to claim 34 in which the retained component hybridises ~~anneals~~ with the further amplified product up to the base before the base which is the SNP [side].

36. (Currently Amended) A method according to claim 34 in which the retained component hybridises ~~anneals~~ to the further amplified product, hybridisation between the retained component and ~~along~~ the sequence corresponding to the locus specific portion and further portion of the further amplified product.

37. (Original) A method according to claim 1 in which a plurality of different retained components, preferably PCR products and/or oligonucleotides, are provided at discrete locations on a support, different retained components annealing to different further amplified products.

38. (Currently Amended) A method according to claim 37 in which the retained component and hybridised ~~annealed~~ further amplified product are contacted with one or more further components to introduce a distinctive unit.

39. (Currently Amended) A method according to claim 37 in which the retained component and hybridised ~~annealed~~ further amplified product are contacted with one or more additional components, the one or more additional component being one or more further oligonucleotides which include a distinctive unit.

40. (Currently Amended) A method according to claim 39 in which the further oligonucleotide has an end base, the end base of the further oligonucleotide is one of the four possible identities for the SNP.

41. (Currently Amended) A method according to claim [[1]] 47 in which the further amplified product includes an attachment unit and the attachment unit facilitates attachment of the further amplified product to a solid support.

42. (Currently Amended) A method according to claim 41 in which the attached further amplified product is contacted with one or more probes having ~~different~~ sequences which at least in part are different from one another, [at least in part,] the contact resulting in hybridisation of one of the probes to the further amplified product.

43. (Original) A method according to claim 41 in which each probe has a common sequence portion to each other, the common sequence portion corresponding in sequence to the locus specific portion of the further amplified product.

44. (Original) A method according to claim 41 in which the probes incorporate at least one different sequence portion compared with one another, the different sequence portion of at least one of the probes corresponding to the sequence of the further portion which is included in the sequence of the further amplified product.

45. (Currently Amended) A method according to claim 41 in which contact of the probes with the further amplified product results in hybridisation of one of the probes to the further amplified product, each different probe having a different distinctive unit [relative to one another].

46. (Cancelled)

47. (New) A method of investigating single nucleotide polymorphisms (SNPs) in a DNA containing sample, the method comprising

contacting DNA from the DNA containing sample with a first set of primers, the first sets of primers including two or more primers, a primer having a locus specific portion and a further portion, the further portion of at least one of the primers being different from the further portion of at least one of the other primers,

amplifying the DNA, the amplification using the first set of primers to give an amplified product, the amplified product including a sequence complementary to the locus specific portion and further portion of a first set primer;

contacting at least a portion of the amplified product with at least one second set of primers,

amplifying the first amplified product to give a further amplified product by annealing at least one of the second set of primers to that part of the first amplified product with a sequence complementary to the further portion and;

examining one or more characteristics of the further amplified product using the presence or absence of a distinctive unit introduced by hybridisation or annealing of a component to the sequence complimentary to the further portion, the component including the distinctive unit, the one or more characteristics providing information on the single nucleotide polymorphisms in the DNA containing sample.

48. (New) A method according to claim 47 in which two or more of the primers of the second set of primers including a second further portion, the second further portion of one of the primers including a sequence which matches the sequence of at least part of the further portion of one of the primers of the first set, the second further portion of one of the primers including a sequence which pairs to the sequence of at least part of the further portion of a different one of the primers of the first set.

49. (New) A method according to claim 47 in which the distinctive unit is introduced during the amplification process.

50. (New) A method according to claim 47 in which the distinctive unit is introduced in a step which is subsequent to the amplification process.

51. (New) A method according to claim 47 in which the component is a probe for the further portion.

52. (New) A method according to claim 47 in which the first sets of primers consist of two forward primers and a reverse primer.

53. (New) A method according to claim 47 in which the further portion of the first set of primers is attached to the 5' end of the locus specific portion.

54. (New) A method according to claim 47 in which the 3' end of the forward primers of the first sets of primers are provided with a SNP identifying portion.

55. (New) A method according to claim 63 in which the locus specific portion and SNP identifying portion of one of the forward primers anneals to the 3' side of the locus having the SNP under investigation and the locus specific portion and SNP identifying portion of the other of the forward primers of that first set does not anneal to the 3' side of the SNP under investigation.

56. (New) A method according to claim 55 in which the annealing primer anneals due to a match between the SNP identifying portion and the SNP site of the sample and the non-annealing primer does not anneal due to a mismatch between the SNP identifying portion and the SNP site of the sample.

57. (New) A method according to claim 47 in which only one second set of primers is provided.

58. (New) A method according to claim 47 in which the second set of primers consists of two forward primers and a reverse primer.

59. (New) A method according to claim 47 in which the second further portion includes a sequence which matches the sequence of the first further portion and / or pairs to the sequence of the amplified product matching the first further portion.

60. (New) A method according to claim 47 in which a plurality of first sets of primers are provided to amplify a plurality of SNP loci, the amplification products resulting being of different lengths.

61. (New) A method according to claim 47 in which a first set of amplifying conditions and a second set of amplifying conditions are employed, the first set of amplifying conditions inhibiting amplification by one or more of the primers.

62. (New) A method according to claim 47 in which the second set of amplifying conditions provides for amplification of the previously inhibited one or more primers.

63. (New) A method according to claim 47 in which one or more of the primers of the first set of primers include a locus specific portion and a further portion, the locus specific portion of one or more primers of the first set of primers annealing to one side of the single nucleotide polymorphism under investigation.